

**CRAB ORCHARD NATIONAL WILDLIFE REFUGE CERCLA PROJECT
MONTHLY PROGRESS REPORT
SEPTEMBER 2018**

**ADDITIONAL AND UNCHARACTERIZED SITES
OPERABLE UNIT (AUS OU)**

1.0 Actions toward Achieving Compliance

Feasibility Study (FS).

The U.S. Fish and Wildlife Service (FWS) continues to provide technical direction to Shannon and Wilson, Inc. (SWI) on the draft FS pursuit to the AOC. FWS is conducting outreach activities to provide opportunities for the public to learn about and be involved with the environmental investigation activities at the Site. These outreach activities will include a fact sheet, news release, public notice, updates to the Crab Orchard National Wildlife Refuge web site, and letters to local government officials, and an Open House on Tuesday, October 23, 2018.

Natural Attenuation in Groundwater

Review of the preliminary data for the volatile organic constituents and carbon isotope data support degradation occurred in several wells. SWI will be directed to prepare a natural attenuation report. The results will be used to further inform alternative analysis in the FS.

Area 8 Copper Site

The pond is contaminated with dissolved copper from buried waste in a dump along the shoreline and beneath the water. The pond in Area 8 South discharges surface water through a culvert and overflows to a down gradient creek along low spots of the road under heavy rain events or high water levels. Surface water samples are collected monthly and tested for dissolved copper at a location(s) near the culvert that discharges into the creek and where it overflows the low spot of the road.

Draft Evaluation of Future Groundwater Risk

The results of the evaluation indicated risks for human and ecological receptors and pathways related to non-potable uses associated with the purposes of the Federal facility including conservation, recreation, industrial, and agricultural. FWS will distribute the revised Groundwater Risk Assessment in early October.

2.0 Status/Results of Sampling, Tests, and Other Data

- The results for dissolved copper and hardness parameters, calcium and magnesium, were received for the surface water sample collected September 12th from Area 8 South Copper Pond. The dissolved copper concentration of 13 ug/L exceeded the water quality criteria for the protection of aquatic life (acute criteria and chronic criteria of 6.83 ug/L and 4.96 ug/L, respectively). The dissolved copper concentrations appear to be influenced by soft water conditions associated with rainfall.

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3.0 Actions Scheduled for Next Month

- Continue to provide technical direction to SWI on preparation of the FS.
- Evaluate results of monitored natural attenuation bench study.
- Explore options to mitigate surface water impacts at Area 8 Copper Pond during the interim period before the cleanup.
- Conduct surface water sampling at Area 8 Copper Pond.
- Continue with public outreach activities.

4.0 Modification or Delays Encountered or Anticipated

None to report.

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AREA 7 PESTICIDES SITE

1.0 Actions toward Achieving Compliance

FWS will issue a Notice of Completion for the work performed by Great Lakes pursuant to the Administrative Order on Consent for the Engineering Evaluation/Cost Analysis (EE/CA). Formal negotiations continue with Great Lakes for the response activities at the Site. A draft Consent Decree has been prepared. The final Remedial Design Remedial Action (RD/RA) Work Plan and associated documents will be attached to a Consent Decree to define the scope of work for implementation of the response action. The removal action will be initiated once the Consent Decree is lodged. The sequence of work includes removal of the warehouses followed by soil sampling to delineate the excavation boundaries and soil removal and off-site disposal.

U.S. Fish and Wildlife Service (FWS) continues to provide technical direction to TRC on preparation of documents for implementation of the response action. TRC submitted a Draft Final Site Restoration Plan to FWS on September 20th for review. USEPA notified FWS, in a letter dated September 21st, its comments were addressed in the Draft Final Sampling and Analysis Plan (SAP). A Final SAP will be routed for signature/approval.

2.0 Status/Results of Sampling, Tests, and Other Data

None to report.

3.0 Actions Scheduled for Next Month

- Finalize the Health and Safety Plan, Sampling and Analysis Plan, and Site Restoration Plan.

4.0 Modification or Delays Encountered or Anticipated

None to report.

5.0 Other Significant Activities

None.

6.0 Personnel Changes

None to report.

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PCB OPERABLE UNIT

1.0 Actions toward Achieving Compliance

Plumes 1 and 3 Operations and Maintenance (O&M)

Groundwater Pump and Treat

Operations and monitoring for the Plume One pump and treatment system continued without problems. The average flow through the system was 3.4 gallons per minute. No PCBs were detected in the effluent.

Updated Quality Assurance Project Plan (QAPP) and O&M Plan

The O&M Plan and QAPP are being updated. These documents will be consistent with USEPA Uniform Federal Policy and reflect changes in project organization due to shift in responsibilities from Schlumberger to the U.S. Fish and Wildlife Service since the certification of construction completion.

Plume 2 Remedial Design

The consent decree amendment for the Plume Two interim remedy is under review by U.S. Department of Justice.

2.0 Status/Results of Sampling, Tests, and Other Data

Water samples are collected monthly for operation of the groundwater pump and treat system.

3.0 Actions Scheduled for Next Month

- Continue preparation of the updated O&M Plan and QAPP.
- Continue monthly sampling of the groundwater pump and treat.

4.0 Modification or Delays Encountered or Anticipated

None to report.

5.0 Other Significant Activities

None to report.

6.0 Personnel Changes

None to report.